

Amendments to the claims:

1. (Currently Amended) A method for fail-safe renaming of logical circuit identifiers for rerouted logical circuits in a data network, the method comprising:

providing a network management module in communication with first and second local access and transport areas and a failover network, the first local access and transport area in communication with the second local access and transport area via an inter-exchange carrier, the failover network in communication with the first and second local access and transport areas and separate from the inter-exchange carrier, and the network management module to:

monitor switches in a first logical circuit, the first logical circuit connecting the first and second local access and transport areas via the inter-exchange carrier, the switches located in the first and second local access and transport areas;

rename a first logical circuit identifier for [[a]] the first logical circuit in the data network to a second logical circuit identifier for a second logical circuit utilized for rerouting data from the first logical circuit in the data network, the second logical circuit connecting the first and second local access and transport areas via the failover network; and

receive a customer report indicating a network circuit failure in the data network, wherein the network circuit failure is detected by receiving trap data indicating the network circuit failure, wherein the trap data comprises status information indicating that a switch in the data network one of the switches is discarding frames or cells; and

identifying, in response to the customer report status information, a failure in the first logical circuit; and

rerouting the data via the second logical circuit.

renaming, in response to the failure, a logical circuit label for the first logical circuit in a logical element module in communication with the network management module;

wherein the renamed logical circuit label is utilized to indicate that the logical circuit data from the first logical circuit has been rerouted, and

wherein the renamed logical circuit label includes the status of the first logical circuit and indicates that the first logical circuit identified by a

~~customer ID for communicating data between first and second locations has been rerouted.~~

2. (Currently Amended) The method of claim 1, wherein the network management module renames the first logical circuit identifier for the first logical circuit ~~in the data network~~ to the second logical circuit identifier for the second logical circuit utilized for rerouting data from the first logical circuit ~~in the data network~~, by:

accessing a network device provisioned for routing data over the first logical circuit ~~in the data network~~;

deleting the first logical circuit in the network device upon detecting a failure in the first logical circuit;

provisioning the second logical circuit in the network device for rerouting the data from the first logical circuit, wherein provisioning the second logical circuit includes assigning the second logical circuit identifier to identify the second logical circuit; and

renaming the first logical circuit identifier to the second logical circuit identifier.

3. (Currently Amended) The method of claim 1, wherein the second logical circuit is a logical failover circuit ~~in the data network~~.

4. (Currently Amended) The method of claim 1, wherein the second logical circuit is a currently unused logical circuit ~~in the data network~~.

5. (Original) The method of claim 1, wherein the first logical circuit identifier is a data link connection identifier (DLCI).

6. (Original) The method of claim 1, wherein the second logical circuit identifier is a data link connection identifier (DLCI).

7. (Original) The method of claim 1, wherein the first logical circuit identifier is a virtual path/virtual circuit identifier (VPI/VCI).

8. (Original) The method of claim 1, wherein the second logical circuit identifier is a virtual path/virtual circuit identifier (VPI/VCI).

9. (Original) The method of claim 1, wherein the first and second logical circuits are permanent virtual circuits.

10. (Original) The method of claim 1, wherein the first and second logical circuits are switched virtual circuits.

11. (Currently Amended) The method of claim 1, wherein the ~~data network is first~~ logical circuit is established in a frame relay network.

12. (Currently Amended) The method of claim 1, wherein the ~~data network is first~~ logical circuit is established in an asynchronous transfer mode (ATM) network.

13. (Currently Amended) A system for fail-safe renaming of logical circuit identifiers for rerouted logical circuits in a data network, the system comprising:

a network device to establish a communication path for a logical circuit and a logical failover circuit ~~in the data network~~, the logical circuit connecting first and second local access and transport areas via an inter-exchange carrier, and the logical failover circuit connecting the first and second local access and transport areas via a failover network that is separate from the inter-exchange carrier;

a logical element module in communication with the network device to configure the logical circuit and the logical failover circuit; and

a network management ~~module, in communication with the logical element module,~~ module in communication with the first and second local access and transport areas and the failover network to:

monitor switches of the logical circuit and located in the first and second local access and transport areas;

~~receive a customer report indicating a network circuit failure in the data network, wherein the network circuit failure is detected by receiving trap data indicating the network circuit failure, wherein the trap data comprises status information indicating that a switch in the data network~~ one of the switches ~~is discarding frames or cells;~~

~~identify, in response to the received customer report~~ status information, a failure in the logical circuit;

~~delete the communication path for the failed logical circuit in the network device;~~

~~establish the communication path for the logical failover circuit~~ through the failover network to reroute [[the]] data from the failed logical circuit;

~~assign a logical failover circuit identifier to identify the logical failover circuit; and~~

~~rename a logical circuit identifier for the failed logical circuit to the logical failover circuit identifier in [[the]] a network database; and database.~~

~~rename, in response to the failure, a logical circuit label for the failed logical circuit in the logical element module;~~

~~wherein the renamed logical circuit label is utilized to indicate that the logical circuit data from the failed logical circuit has been rerouted, and~~

~~wherein the renamed logical circuit label includes the status of the failed logical circuit and indicates that the failed logical circuit identified by a customer ID for communicating data between first and second locations has been rerouted.~~

14. (Original) The system of claim 13, wherein the logical circuit identifier is a data link connection identifier (DLCI).

15. (Original) The system of claim 13, wherein the logical failover circuit identifier is a data link connection identifier (DLCI).

16. (Original) The system of claim 13, wherein the logical circuit identifier is a virtual path/virtual circuit identifier (VPI/VCI).

17. (Original) The system of claim 13, wherein the logical failover circuit identifier is a virtual path/virtual circuit identifier (VPI/VCI).

18. (Original) The system of claim 13, wherein the logical circuit and the logical failover circuit are permanent virtual circuits.

19. (Original) The system of claim 13, wherein the logical circuit and the logical failover circuit are switched virtual circuits.

20. (Currently Amended) The system of claim 13, wherein ~~the data network is the~~ logical circuit is established in a frame relay network.

21. (Currently Amended) The system of claim 13, wherein ~~the data network is the~~ logical circuit is established in an asynchronous transfer mode (ATM) network.

22. (Cancelled)

Please add the following new claims

23. (New) The method of claim 1, wherein the switches communicate the data via the first logical circuit, and wherein the network management module is separate from the switches that communicate the data.